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Shopping Mall Green Spaces and Customer Revisit Intention: Mediating Effects of Environmental Awareness

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ABSTRACT

This study investigated the impact of shopping mall green spaces on customer revisit intention, focusing on the mediating effects of environmental awareness. A causal quantitative design was employed, using purposive sampling to collect data from 300 recurrent visitors to the Mall of Asia Sky Garden via a 5-point Likert scale survey. The data were analyzed using Pearson Correlation and Mediation Regression, with the significance of the indirect effect confirmed by the Sobel Test. Results indicated that all hypothesized relationships were supported, confirming highly significant positive correlations between Green Spaces, Environmental Awareness, and Customer Revisit Intention. The analysis established that Environmental Awareness partially mediated the positive relationship between green space quality and customer revisit intention. The study concluded that while green spaces directly fostered patronage, they also provided a significant psychological pathway by boosting environmental consciousness, which further reinforced customer loyalty.

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Introduction

Shopping malls were becoming more than just places to shop; they were vibrant centers where social interactions, leisure, and business came together. In order to improve customer happiness and create relaxing areas, mall designers had been progressively integrating green elements including indoor plants, landscaped gardens, water features, and natural lighting. According to Beatley [2], integrating natural elements into urban environments could positively influence human well-being and strengthen individuals' connection to nature. These findings supported the idea that green spaces not only improved aesthetic appeal but also contributed to sustainable urban development, reflecting the growing consumer demand for environmentally conscious design. In the Philippines, shopping malls had adopted green design features, recognizing their potential to improve visitor satisfaction and corporate image [1].

However, limited research had examined whether green spaces within shopping malls directly promoted environmental awareness and influenced customer loyalty. While Lee, Park, and Lee [9] studied the effect of green products on purchase intention, the impact of green mall spaces on revisit intention remained unclear. Li, Tulcanaza-Prieto, and Lee [11] found that environmental features in shopping spaces could directly affect customers' emotional responses and revisit intentions. Despite this, few studies had fully explored the mediating role of environmental awareness in the relationship between green space design and customer loyalty in commercial settings.

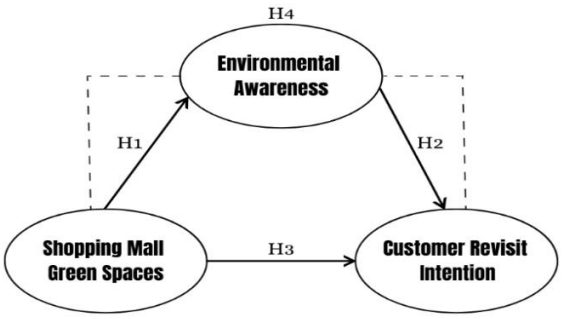


Fig. 1. Conceptual Framework

The study aimed to look into how environmental consciousness mediated the relationship between green spaces and revisit intention (H4) as shown in Figure 1. A study in ecotourism indicated that environmental awareness significantly affected revisit intention, even when direct influences from environmental concern were minimal [8]. Moreover, research on residents in high-rise urban environments indicated that exposure to "smart green spaces" significantly elevated environmental awareness, subsequently improving well-being outcomes [10]. This finding had implications for the potential of such mediation to occur in constructed environments. This research also sought to investigate the direct relationships

between green spaces and environmental awareness (H1), environmental awareness and revisit intention (H2), and green spaces and revisit intention (H3). The findings were expected to provide valuable insights for mall developers, marketers, and policymakers in creating sustainable, customer-centered retail environments.

Material and Methods

The study employed a causal quantitative research design to investigate the role that environmental consciousness had in mediating the relationship between green spaces and patrons' inclination to return to Pasay City's SM Mall of Asia Sky Garden.

The study focused on MOA's recurrent customers, as their direct experience with the green areas qualified them to comment on the study's variables. Non-probability sampling was used, specifically purposive sampling, to select participants who had visited the MOA Sky Garden. A total of 300 respondents was selected for the study.

The main tool used was a survey questionnaire. The instrument measured the independent variable (Shopping Mall Green Spaces), the mediator (Environmental Awareness), and the dependent variable (Customer Revisit Intention). The questions for the constructs were adapted from earlier studies [#15, #5]. A 5-point Likert scale (1= Strongly Disagree, 5= Strongly Agree) was used for measurement. The questionnaire's reliability was confirmed using Cronbach's Alpha, with all constructs having scores above 0.70.

The data was analyzed using statistical methods necessary for testing the study's hypotheses (H1-H4). Pearson Correlation was used for the preliminary testing of the linear relationships between the variables (H1, H2, and H3). This was essential to confirm the prerequisite direct associations before mediation. Mediation Analysis was applied to examine Hypothesis 4. The mediation was tested using a series of linear regressions to establish Path A (Green Spaces → EA), Path B (EA → Revisit Intention), and the Direct Effect (Green Spaces → Revisit Intention). The Sobel Test formally confirmed the significance of the entire indirect effect.

Results

A. The Pearson Correlation

The Pearson Correlation analysis (Table 1) showed strong, highly significant positive correlations between Green Spaces and Environmental Awareness ($r = 0.762$, $p < 0.001$), Environmental Awareness and Customer Revisit Intention ($r = 0.662$, $p < 0.001$), and Green Spaces and Customer Revisit Intention ($r = 0.784$, $p < 0.001$), across 300 respondents. Green spaces were associated with increased environmental awareness and a greater likelihood of customers revisiting the mall. These findings support the relationship established in the mediation model.

Table 1. Pearson Correlation Analysis

Variables	r-value	p-value
Shopping Mall Green Spaces and Environmental Awareness	0.762	< 0.001
Environmental Awareness and Customer Revisit Intention	0.662	< 0.001
Shopping Mall Green Spaces and Customer Revisit Intention	0.784	< 0.001

B. Hypothesis Testing

Based on Table 2 regarding Hypothesis Testing, it can be concluded that there is a significant influence between the independent and dependent variables. The results of the statistical analysis indicate that the research hypothesis is accepted.

Table 2. Hypothesis Testing

Hypo-theses	Path	Path Coeff. (B)	T Statistic	Sig.	P-Value
H1	Green Spaces → EA	1.026	20.312	0	0.05
H2	EA → Revisit Intention	0.158	2.826	0.005	0.05
H3	Green Spaces → Revisit Intention (Direct Effect)	0.913	12.116	0	0.05
H4	Green Spaces → EA→ Revisit Intention (Mediation Effect)	(Sobel Test)	2.794	<0.01	0.05

1. H1: Green Spaces → Environmental Awareness

The hypothesis testing (Table 2 & Fig. 2) and mediation model reveals a significant, strongly positive relationship between Green Spaces and Environmental Awareness was found (beta = 1.026, sig.= 0.000, Coefficient Std. Error = 0.051), leading researchers to reject the null hypothesis and conclude that green spaces in shopping malls enhanced visitor environmental awareness.

2. H2: Environmental Awareness → Customer Revisit Intention

Similarly, a significant, positive relationship between Environmental Awareness and Customer Revisit Intention was identified (beta = 0.158, sig. = 0.005, Coefficient Std. Error = 0.056), supporting Hypothesis 2: as environmental awareness increased, so did the likelihood of revisiting the mall.

3. H3: Green Spaces → Customer Revisit Intention (Direct Effect)

The Pearson Correlation results also correspond to the analysis which showed a significant direct relationship between green spaces and customer revisit intention (beta = 0.913, sig. < 0.000). This supported Hypothesis 3, indicating green spaces positively influenced intentions to return to shopping malls even after accounting for environmental awareness.

4. H4: Green Spaces → EA → Customer Revisit Intention (Mediation Effect)

A significant mediating effect was found for Hypothesis 4, with a Sobel test statistic of 2.794. Environmental awareness partially mediated the link between shopping mall green spaces and revisit intention, reflecting both direct and indirect effects.

Discussions

Fig. 2 presents the Research Framework, which illustrates the study's conceptual model. It visually maps the relationships between variables.

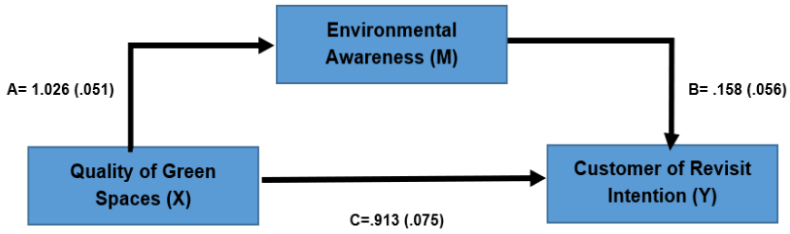


Fig. 2. Research Framework with Figures

The results of this study demonstrated a significant positive relationship between shopping mall green spaces and environmental awareness. This finding indicates that the presence of well-designed green spaces, such as indoor gardens and rooftop parks, can meaningfully enhance visitors' consciousness of environmental issues. This result aligns with prior research in environmental psychology and consumer behavior. For example, Cheng and Wong [4] found that integrating biophilic elements into mall landscapes improved visitors' overall evaluations of the environment and stimulated pro-environmental reflections. Their study emphasized that exposure to natural elements in commercial spaces can shape cognitive and emotional responses toward sustainability. Similarly, Kruize et al. [7] explained that spending time around plants and natural settings increases individuals' appreciation of nature and strengthens their concern for environmental preservation. These findings are theoretically grounded in the Biophilia Hypothesis [16], which posits that humans possess an innate affinity for natural patterns and living systems. In shopping mall contexts, the incorporation of green spaces may activate this inherent connection and foster greater environmental awareness among visitors.

The study also confirmed a significant positive relationship between environmental awareness and customer revisit intention. This suggests that consumers who are more conscious of environmental issues are more inclined to return to shopping malls that reflect sustainable values. This outcome is consistent with Birgit [3], whose research showed that customers were more likely to trust and revisit services perceived as environmentally responsible. The perception that a business cares about ecological sustainability enhances corporate image and strengthens emotional bonds with customers. In addition, the findings parallel those of Yuniati et al. [17], who highlighted the important role of satisfaction in linking environmental awareness to revisit intention. Their work implies that environmentally aware customers experience greater satisfaction when their values align with a company's sustainability initiatives. This satisfaction increases loyalty. The present results are further reinforced by the Value Belief Norm Theory [14], which argues that heightened environmental

awareness shapes personal moral norms that encourage environmentally supportive behaviors. Within this framework, consumers who value environmental protection are more likely to support and repeatedly patronize businesses that embody these principles.

The analysis further confirmed a highly significant, direct, and very strong positive relationship between shopping mall green spaces and customer revisit intention. This indicates that green spaces influence behavioral intentions in addition to shaping psychological variables. Zhang and Dong [18] similarly reported that shoppers exposed to malls featuring eco-friendly design elements expressed a stronger intention to revisit. Their findings suggest that sustainable design contributes to a positive shopping experience by enhancing comfort, aesthetic appeal, and perceived quality. Likewise, Ortegón-Cortázar and Royo-Vela [13] demonstrated that the integration of nature-based design cues creates immersive and engaging experiences. These experiences translate into a stronger intention to return. These empirical findings are consistent with the Expectation Confirmation Theory [12], which posits that customer satisfaction and subsequent behavioral intentions are shaped by the confirmation of prior expectations. When green spaces perform at or above customers' expectations by providing relaxation, aesthetic enjoyment, and environmental value, customers are more likely to develop positive evaluations and stronger revisit intentions.

Importantly, the mediating analysis revealed that environmental awareness partially mediated the relationship between green spaces and revisit intention. This means that green spaces directly foster customer loyalty. They also indirectly enhance loyalty by increasing environmental awareness. The mediating effect highlights two complementary pathways. The first pathway is experiential and relates to the immediate benefits of green environments. The second pathway is psychological and relates to increased environmental consciousness. This finding is supported by Kusumawati et al. [8], who found that environmental awareness functioned as a moderator in tourism contexts. Their study showed that environmentally conscious tourists responded more positively to sustainability initiatives. Although their research framed awareness as a moderating factor, it similarly underscores the pivotal role of environmental consciousness in shaping behavioral responses. Additionally, the findings resonate with Demir et al. [6], whose research on green hotels demonstrated that consumption values linked to environmental concern mediated the relationship between awareness and intention to stay. Collectively, these studies confirm that environmental awareness strengthens the psychological mechanisms underlying customer loyalty and repeat patronage.

Conclusion

In conclusion, Green spaces in shopping malls greatly raise environmental awareness and encourage pro-environmental behavior among patrons who shop in environmentally conscious locations. Environmental consciousness has a big impact on mall customers'

intentions to return. Consumer loyalty results from their awareness of environmental responsibility, which enables eco-friendly shopping malls to increase their business by encouraging sustainable practices. Green space quality significantly influences customer revisit intention, attracting favorable shopping behavior and strengthening relationships with mall management. Well-managed green spaces attract foot traffic and maintain customer loyalty. The study reveals a significant link between shopping mall green spaces and customers' revisit intention, highlighting the role of environmental awareness in influencing customers' return intention, fostering a sense of pro-environmental loyalty through sustainable design.

The study found that mall green spaces had a significant impact on customers' intention to return, with environmental consciousness acting as a partial mediating factor. Hence, mall managers and developers were encouraged to see green spaces not just as decorative features but as valuable investments that enhance customer satisfaction, strengthen loyalty, and contribute to long-term business growth. Adding more biophilic features, such as landscaped gardens, vertical gardens, and natural light, would enhance the psychological health and experience of visitors. Mall management was also suggested to adopt sustainability-focused programs, like environmental displays or green marketing campaigns, to further promote public awareness of the environment and enhance customer interest.

Limitation and Suggestions

Yet, the research was confined to the SM Mall of Asia Sky Garden, which limited the external validity of the findings to the rest of shopping malls or areas. The sample was concentrated on repeat customers, mostly young adults, who may not necessarily be representative of other age groups. The study depended on self-reported data acquired through survey questionnaires, which may have introduced response bias. Future research is encouraged to encompass multiple mall locations, a more representative cohort of respondents, and additional variables such as customer satisfaction, perceived value, or ecological behavior. Qualitative or mixed-method studies may provide insights into the degree to which sustainable mall environments foster long-term customer loyalty and promote pro-environmental behavior.

Conflict of Interest

The authors declare no conflict of interest.

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